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THE DOE RUN COMPANY

HERCULANEUM, MISSOURI

A Report to Our Community 1998

John FitzSimmons, right, Doe Run's Vice President of Primary Smelting, meets with Steve Brown, the Herculaneum smelter's General Manager

Every year Doe Run's Herculaneum site shares information about its environmental performance and community involvement with its neighbors. I'm proud to be part of the process this year as the smelter's general manager.

In 1998 we continued investing in environmental technology and equipment, including new Teflon bags for the baghouse, which makes dust collection more efficient. The year 1998 also saw improvements in the sinter plant, blast furnaces and other areas contributing to overall environmental performance.

Doe Run continued investing in the community, as well. A site beautification project was begun along Main Street that benefits both the neighborhood and the smelter. New fencing, landscaping, trees and flowers provide attractive additions to the facility. Company crews cleaned debris from a site along Joachim Creek, allowing the area on both sides of the creek to be dedicated by the city as Bates Park.

The skyline of the Herculaneum smelter continued changing in 1998. The brick stack that served the facility since 1910 began being dismantled. It had been replaced by a taller concrete stack the previous year.

We're proud of our positive performance during the last year and look forward to more improvements in the future. Through it all, Doe Run's commitment to the environment, the safety of employees and the protection of the community remains as strong as ever.

Steve Brown
General Manager

On the cover: *Environmental manager Jim Lanzafame, left, and industrial hygienist Gar Walker show off some of the new fencing and landscaping added along Main Street in 1998.*

SAFETY

Doe Run's Herculaneum smelter takes its responsibility for the safety of employees and the protection of the community seriously. Education and training for new hires is followed by ongoing safety refresher courses and regularly scheduled safety meetings.

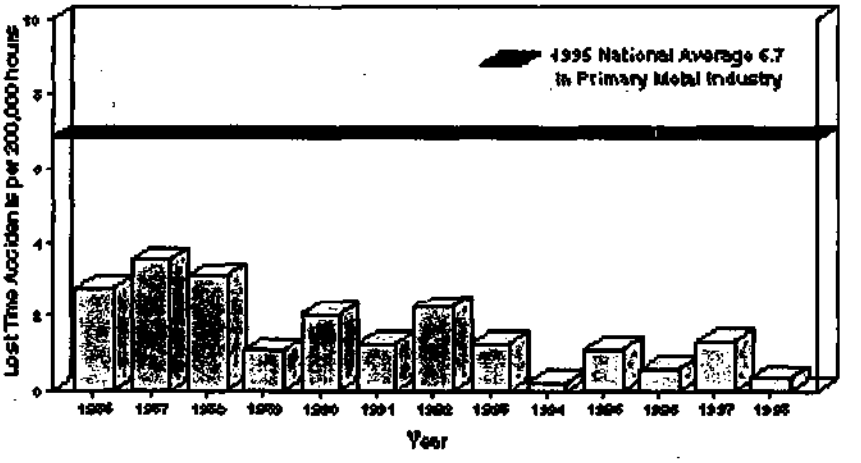
In 1998, the diligence paid off. On September 23, 1998, the facility marked one year without a lost-time injury. To reach that milestone, the employees worked about 780,000 hours with no employee injuries requiring time away from the job.

A program that pairs new employees with more experienced fellow workers who act as mentors also has made a difference. Safety is improved because new hires are comfortable asking questions of their mentors about procedures, policies and protective equipment. Those relationships build on the extensive training all employees receive beginning when they join the company and continuing throughout their careers.

Employee training is geared to a specific job. Workers learn to properly use equipment, handle materials and operate machinery. They also are fitted with personal protective equipment. Depending on the assignment, that can include respirators, hard hats, ear plugs, steel-toed safety shoes, and special gloves.

The goal is no accidents and no injuries. Meeting the target happens one employee at a time, one shift at a time by making safety a priority.

Herculaneum Smelting Division
Lost Time Incident Rate



AIR

Doe Run's ongoing effort to reduce air emissions at the Herculaneum smelter takes more than commitment. Substantial financial investments in new equipment and upgraded technology are needed to get results.

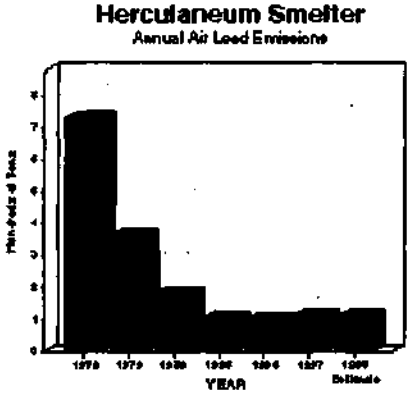
During the last year $2.7 million was spent on new equipment to reduce air emissions. New Teflon bags were installed to more efficiently collect dust particles. Engineering changes in the acid plant allowed the site to capture more sulfur dioxide, a byproduct of the smelting process. Work was begun to install a mechanized dust wetting system for the dross furnace products.

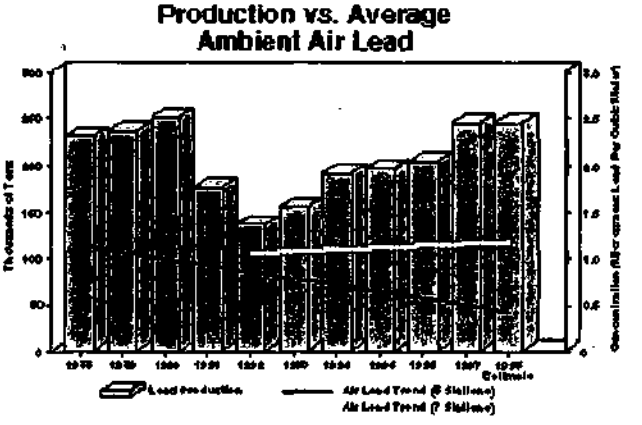
Doe Run continues working with the Missouri Department of Natural Resources and the federal Environmental Protection Agency to develop a plan for future environmental improvements. The Herculaneum site's air lead emissions are measured by seven monitoring stations located near the plant. Data is collected regularly in accordance with state and EPA guidelines. The information is reported to state environmental agencies.

Six of the stations have been in place for 20 years and all met the standard for eight consecutive quarters during 1997 and 1998–the state's definition of attainment. The seventh station was added in 1992 at Broad Street across the street from the smelter. It has not attained the standard for any quarter since it was installed and for the past three years average readings there have increased.

As a result of this trend and Doe Run's assessment of the source of these emissions, the company will proceed with two major projects. The first project will be to install Teflon bags at the largest sinter plant baghouse by July of 1999 to more efficiently capture lead dust. The other baghouses already have been fitted with similar bags. The second project will use a new investigative tool to determine the impact of various smelter operations on emission levels at the site's fenceline. Once that work is complete, appropriate new controls can be put in place.

The amount of sulfur dioxide in the air is recorded separately and remains within federal standards.





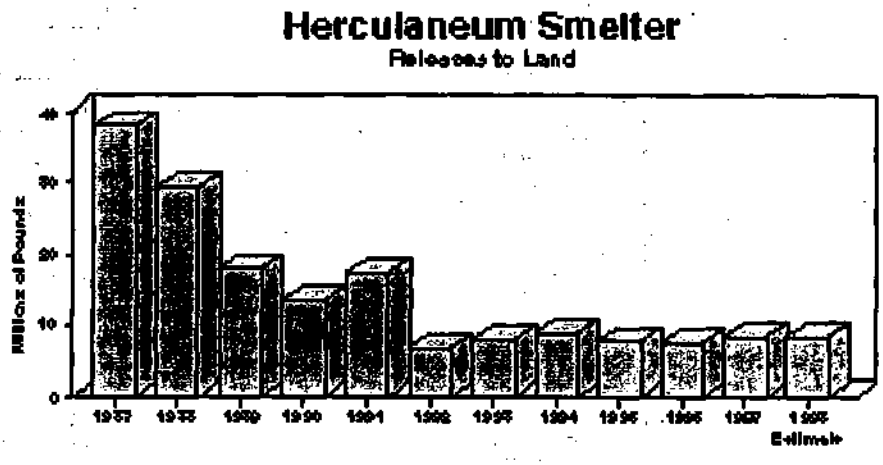
At right: *Operations manager Steve Anold, left, discusses the new Teflon baghouse bags with general foreman Earl Allen.*

LAND

Innovations in technology have dramatically improved the way lead is mined, milled, and then processed at the smelter into usable finished products. One thing that hasn't changed is that smelting metals leaves behind a byproduct called slag, a glassy solid material stored on land the company owns near the smelter.

The slag contains a significant amount of zinc and Doe Run is working on an experimental new process called zinc fuming that could result in removing the zinc as a usable product. Zinc fuming involves heating the slag in a special furnace in order to separate the zinc and residual lead, rendering the remaining material essentially lead and zinc free. The zinc product would be sold to companies that use zinc in manufacturing processes and the lead would go into the smelter's lead products.

In addition, the company continues to improve the smelting process, leaving less and less lead and other metals in the slag.



At right: *Heavy equipment operator Tney Macklin checks slag after it is prepared to be recycled back into the smelting pocess.*

WATER

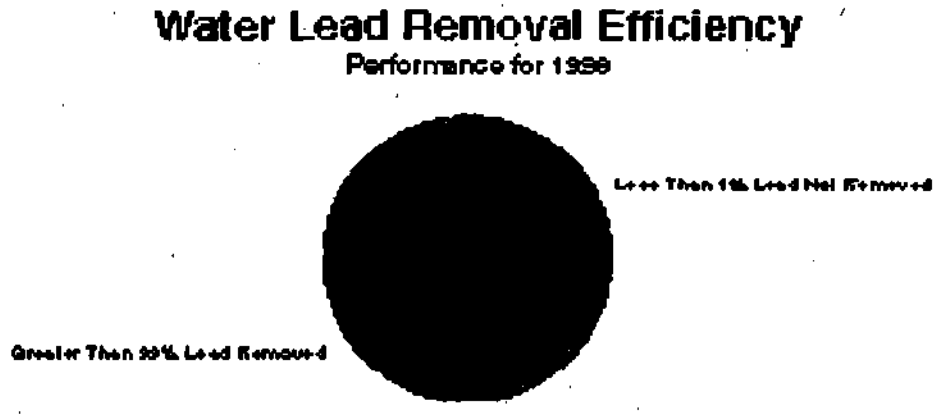
Water is vital to making lead. The Herculaneum smelter uses about 500,000 gallons of water a day in its processes.

Water is pumped from a well beneath the Mississippi River as it is needed. Once it is used, stringent environmental standards regulate its treatment and return to the river.

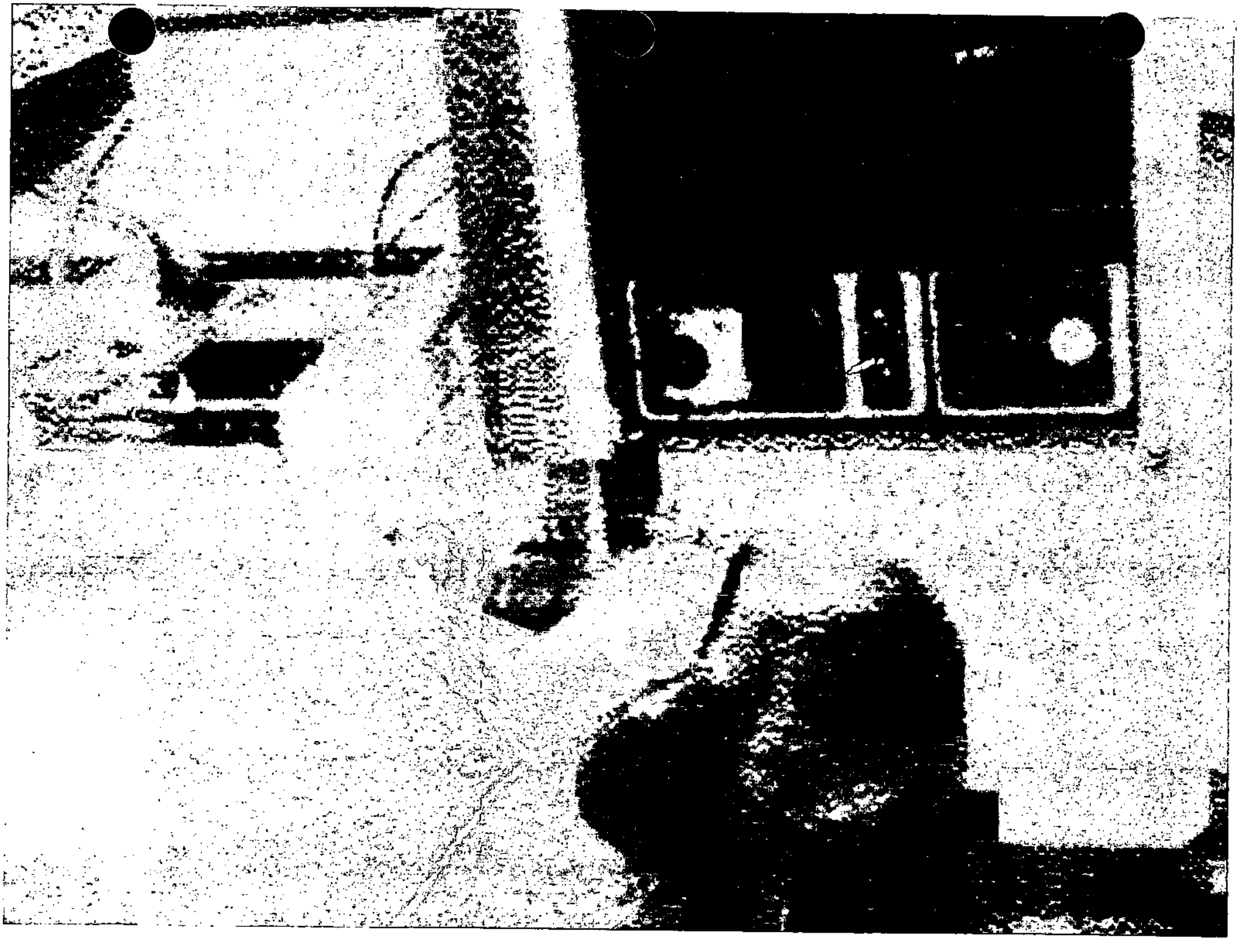
The site has a wastewater treatment facility that removes lead and other materials. Specially trained employees use sophisticated equipment to regularly test the water before and after it is treated to ensure that it meets environmental guidelines.

Only after metal and other substances are removed from the water is it discharged into the Mississippi River. The discharged water is also routinely tested. The treatment process is so thorough that process water from the Herculaneum site equals less than one ten-thousandth of the total lead in the Mississippi River at the smelter location.

Discharging water to the river requires federal permits. Government environmental agencies monitor performance and Doe Run remains in compliance with those permits.



At right: *Process water is treated on site before being discharged into the Mississippi River. Environmental technician Dale Craig checks the reading on a special machine that tests treated water*



HEALTH EDUCATION

As a producer of lead and a member of the Herculaneum community for more than a century, Doe Run has a long history of working safely with metals. The company shares its expertise and resources with neighbors and supports a variety of health information projects.

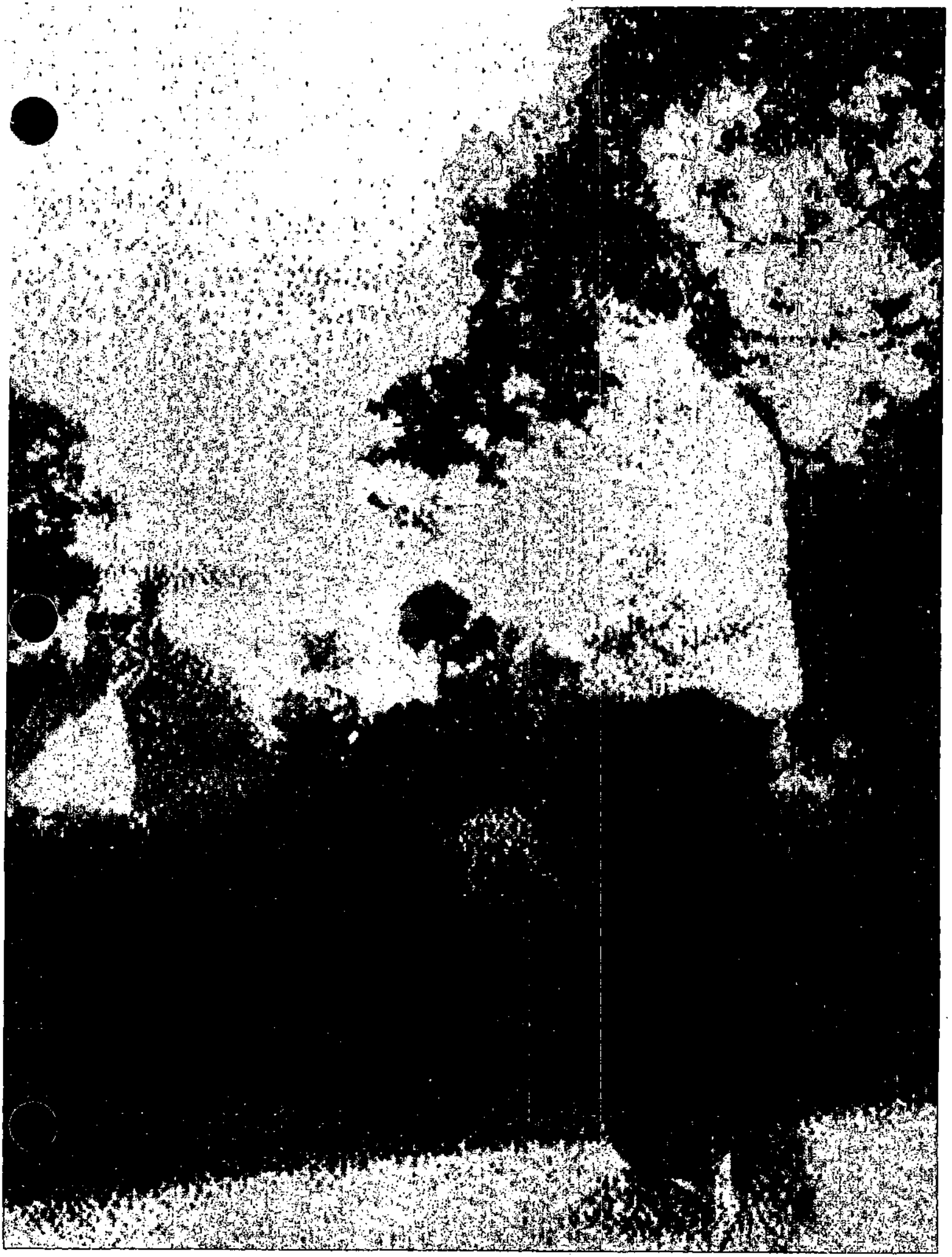
The smelter educates employees about how to properly handle lead and other materials. Informing neighbors about the best way to remove lead paint from their homes and regularly communicating about site-related environmental issues are natural extensions of that effort.

Smelter tours, meetings with local educators, and regular contact with residents living nearest the facility are ongoing features of the Herculaneum smelter's health education program.

Other projects include:

- Free blood tests for Herculaneum residents
- A newsletter called Neighbor Notes sent every month to neighbors living closest to the smelter
- Free grass seed and fertilizer provided each spring to residents nearest the smelter to promote thick, healthy lawns and keep lead dust from potentially being tracked into homes
- Information about the safe removal of residential paint
- Door-to-door visits with neighbors near the smelter to answer questions and give information
- Replacement of topsoil in yards with higher levels of lead in soil

At right: *Employees Chrissy Harbison and Jefrey Boyer apply grass seed as pat of Doe Run's annual program to promote healthy lawns at homes neaest the smelter.*



COMMUNITY INVOLVEMENT

Doe Run and the City of Herculaneum have shared in the success of the company and the community for more than a century. Herculaneum was founded in 1808 as a lead processing center. By the 1890s, the St. Joe Lead Company, which evolved into Doe Run, was operating a local smelter.

That long history forged a relationship that continues today. Doe Run supports the community throughout the year with financial contributions to the Herculaneum police and fire departments, money for college scholarships and sponsorship of the Fourth of July celebration.

A company street sweeping machine is used to clean city streets near the smelter. City residents benefit from use of the Joachim Golf Course, which Doe Run leases for $1 a year to an independent management committee, and ball fields on company-owned property. The company also leases the city park and boat ramp to the town for $1 a year.

In 1998 Doe Run crews worked to clear debris from the south side of Joachim Creek and planted grass seed, making the site available for public use as expanded Bates Park.

At right: *Doe Run crews cleared debris from the south side of Joachim Creek so it could be used as a city park. Herculaneum city aldermen Scott Ramsey, left, and Patty Welch pose at the new Bates Park with Doe Run employees Karl Payne, second from left, and Jeff Crocker.*